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SAMUEL LATHAM MITCHILL:
A PHYSICIAN IN THE EARLY DAYS
OF THE REPUBLIC

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DURING the last decades of the eighteenth century a greater interest in medicine developed in America than in any earlier period. Since medical schools were few in British America, the education of doctors was confined largely to English and, to a lesser extent, other European universities. At the beginning of the American Revolution the universities of Leyden and Edinburgh, and the hospitals of London had achieved world-wide scientific distinction. By the end of the century empirical medicine in the United States had advanced to a significant degree, especially in the cities of Philadelphia and New York. American doctors, educated in England, achieved wide reputations in the United States, where the physician was viewed as a significant factor in developing a newly emerging social structure.

The responsibilities and obligations accepted by Samuel Latham Mitchill of New York went beyond the duties expected from any well-trained physician, for he attempted to romanticize the medical profession and to extend its influence beyond the field of medicine.



This early print of Samuel Latham Mitchill was based on a portrait by John Wesley Jarvis.

Mitchill was born in North Hempstead, Long Island, on August 20, 1764, the son of Robert and Mary Latham Mitchill, industrious Quakers whose entire lives were spent farming the land. His early training was at the hands of his uncle, Samuel Latham, a practicing physician in North Hempstead. After having received the elemental principles of medicine from his uncle, Mitchill, in 1781, served in New York as an apprentice to the well-known physician Samuel Bard. He remained with Bard until 1783. At the recommendation of his mentor and, with the financial assistance of a bequest from his uncle, he left the United States to begin his formal study of medicine at the University of Edinburgh in Scotland. Returning to the United States three years later as a licensed physician, he began to take an active interest in politics and law, in addition to medicine.

It is beyond the scope of this paper to delve into the hundreds of matters which occupied Mitchill's life until his death in 1831. It is sufficient to say that during his lifetime he was the first Professor of Natural History, Chemistry, and Agriculture at Columbia College; one of the founders of the Society for the Promotion of Agriculture, Manufactures, and Useful Arts; physician of New York Hospital; one of the founders of the *Medical Repository*, the first professional medical journal in the United States; Assemblyman to the New York Legislature; member of the House of Representatives; United States Senator from New York; Surgeon-General of the militia of the State of New York; and one of the founders of the College of Physicians and Surgeons in New York City.¹

To Mitchill, the medical practice and the health of American citizens were integral components in the growth of an American civilization and culture, for if man by his own initiative was to form a new world order, his physical and mental well-being were as essential to this new order as was the structure of his political society. America possessed the qualities for world distinction and recognition by those living in the post-Revolutionary period. To Mitchill it was axiomatic that with diligence and empirical practices, developing systematically and organically, one could come to grips with and resolve the historical plagues of mankind's ills. Mitchill considered the study of medicine and the development of reputable health standards as an integral concomitant factor in his concept of destiny.

In spite of the professed relationship between medicine and politics

expressed by Mitchill, it can not be determined that any large number of physicians entertained similar beliefs. With the exception of Benjamin Rush, no other man of medicine of that era endeavored to master skills in so many diversified areas. Yet Mitchill thoroughly recognized his concept of nationalism to be the common denominator behind all areas involving man and society, and it was for these reasons that he took an especial interest in the public health.

In the 1790's the cities of Philadelphia and New York fell victim to rampant epidemics of yellow fever, so severe that it was estimated that over ten per cent of the population of Philadelphia died in 1793 from this disease.² While the causes of yellow fever and malaria were not to be determined for another hundred years, Mitchill entertained and defended ideas which were at great variance from those views prevalent at the time. He attempted to convince public opinion that yellow fever was not imported from foreign cities and countries, the view universally accepted, but was, indeed, exclusively of domestic origin.³ Between 1793-98 Mitchill toiled relentlessly in attempting to awaken public awareness to his idea only to be portrayed in mocking terms on the part of those whose opinions had been fixed and predetermined.

An epidemic in New York in 1798 witnessed a reversal of popular opinion, and Mitchill's ideas, not yet totally accepted, were at least heard. The epidemic was so severe that Mayor Richard Varick requested that the Medical Society of the State of New York appoint a committee to inquire into the origins, causes, and means of prevention of the disease. Mitchill headed the committee of three and promptly set to work in an attempt to rally public opinion to his ideas. Between August 1 and November 1 over 2,000 lives had been lost to yellow fever.⁴ This figure may be even more significant when one considers that conservative estimates indicated that approximately two-thirds of the inhabitants of the city, fearing for the safety of their lives, fled the city area in search of temporary shelters in the peripheral areas.

As spokesman for the committee, Mitchill finally was given the opportunity to expound in detail his ideas regarding the domestic origin of yellow fever and his rejection of the prevailing theory of contagion. It was his one wish that with an informed public rational ideas might replace predetermined opinions. As a result of his belief that yellow fever was of domestic origin, Mitchill became interested in sanitary reform.⁵ Since he pioneered the argument against the theory

of contagion, he devoted his energies to determining the origin of those home-bred pestilential diseases. He still claimed that New York was one of the healthiest cities in the United States; yet he believed that the inhabitants were, in actuality, poisoning the city as a result of primitive sanitary conditions. To him "an alteration and a considerable one too, of housekeeping, and modes of life will be necessary."⁶

Although the association between yellow fever and the mosquito was unknown to Mitchill, his ideas did contain suggestions which would check, if not eliminate, the disease. He believed that sailors and merchantmen did not get the sickness in the West Indies by their association with the natives, but by breathing in air which had become contaminated as a result of poor sanitary conditions. He concluded by declaring that "the disease called yellow fever may be produced on shore and in this city, . . . and that this destroying though secret agent is none other than pestilential vapors . . . that it is not communicable from person to person in a pure atmosphere, but spreads only in an air loaded and contaminated by putrid exhalations."⁷

Mitchill recommended what amounted to a revolution in sanitation. First, he specifically entreated that sewers should not be permitted to drain into shallow water. Second, since sinks and privies were so contaminated as to make disease inevitable, thought should be given as to the best means by which fresh-running water might be secured to remove waste to the outlying districts of the city. Third, cellars, kitchens, and yards were being selfishly neglected by residents, thus permitting waste to collect over days, weeks, and months. It was necessary that new laws should be passed immediately and be rigidly enforced, which would require housekeepers to remove all waste and dirt from their cellars, yards, and kitchens once a day during the period from June 1 through November 1, and twice a week during the remainder of the year.⁸ He warned, emphatically, that unless these recommendations were adopted and enacted into law with all deliberate speed, the fever would most assuredly return the next year.

Upon receiving this special report the Common Council of the City of New York thanked the Doctor for his painstaking study and recommended that his findings be made available to the public in book form. Aside from this action nothing else was undertaken to insure the much-needed reforms. Although not all of his recommendations were to be enacted before the passage of an additional 50 years,

his opinions did result in attempts to improve the over-all sanitary conditions and constituted an awakening on the part of the public to an acceptance of individual responsibility.

New York, at this time, had become a significant seaport for the European and Caribbean trade. Conscious of the dangers inherent in merchant shipping, Mitchill proposed a series of measures designed to protect sailors from the scourge of yellow fever and other maladies. His specific recommendations included the establishment of a quarantine station outside of the city, where ships containing sick persons or damaged cargoes could remain until pronounced safe by an inspecting physician. Since the Constitution specifically delegated the regulation of interstate and foreign commerce to Congress, he petitioned Congress to enact such a measure. Mitchill felt it was the responsibility of the Federal Government to assume active leadership in securing a piece of land at the entrance of New York harbor where wharves, stores, and warehouses might be erected for the examination of sick persons and spoiled cargoes. The best site to Mitchill was on one of the islands off the eastern coast of Staten Island, to be run by the Federal Government under the control of the custom-house. Mitchill's petition to Congress received favorable attention when on February 25, 1799, John Adams signed into law a bill providing for the erection of such buildings, under the supervision of the Secretary of the Treasury, in areas other than the ports of the principal commercial centers.⁹

Mitchill usually endeavored to blend science with public transactions, and considered medicine to be extremely significant for the protection of life in a country where individuals possessed such extensive rights as to the meaning of life. In at least one respect the relative freedom and prosperity enjoyed by the average American seemed to have a negative rather than a positive influence. Mitchill often criticized American society for unnecessary calls upon medical talents as a result of overeating to the point of gluttony, overdrinking to the consequence of drunkenness, and overindulgence in other activities to the point of physical enervation. He attempted to warn mankind that the high consumption of animal fats would affect the body adversely, while American hydrophobia had been increasing the appetites for inebriating drink to an alarming rate, which, in the interest of the nation's health, should be restrained in some fashion by the government.

Such overexcesses had a far more serious consequence in that the

number of quack doctors was increasing at an alarming rate "for among the physic-taking and doctor-loving people, all the classes of professional men find employment."¹⁰ The range of doctors ran the gamut from the "stroking" doctors who tried to drive away disease through the power of animal magnetism to the "obi" doctors who tried to relieve the body of its illness through incantations derived from African magic. Only with a proper sense of moderation could the American expect to obtain reasonably good health.

Mitchill's interests in commerce and contagion continued to occupy his time and thoughts after he arrived in Washington in 1801 to accept his seat in the House of Representatives. As a member of the Committee on Commerce and Manufactures, he worked to secure changes in health laws and quarantine regulations. By 1803, popular opinion had begun to shift away from the prevailing theory of contagion.

In February, 1803, the House established a special committee to prepare a report to Congress concerning quarantine regulations then in effect, and to submit measures which the committee felt should be enacted into law. As chairman of the special committee Mitchill seized upon the opportunity to present a vigorous protest against "the monstrous and absurd opinions and practices of mankind on this subject." Mitchill's intentions were twofold: first, to lash out at the Spanish, who were imitating the folly of some American cities for their "intolerably nonsensical" practice of requiring ships from New York and Philadelphia to lay at anchor in quarantine for one hundred and ten days at Port Mahon, in Minorca, for fear of importing yellow fever and other infectious diseases; second, to espouse a plan for sanitary reform for naval ships under the direction of the Secretary of the Navy.¹¹ Mitchill hoped to convince Congress that the very practice of quarantine was dangerous in itself. A ship at anchor over a period of time would increase the dangers of disease rather than alleviate such a condition. For these reasons the actions by Spain crippled American commerce unnecessarily by fostering a prohibition of trade, which unfortunately had been copied from similar unenlightened American quarantine regulations. While Mitchill was responsible for and successful in helping to improve health conditions on naval and merchant ships, his efforts to relax quarantine restrictions were premature by many years.

Mitchill continued to press for other reforms for the health of sailors and merchant seamen. Since these men brought national glory to the

United States, not to mention national wealth, their health was a vital factor whether on land or at sea. A particularly alarming difficulty centered around the seamen who became ill while in port before they shipped out on another voyage. On occasions such men often were refused admittance into infirmaries in various cities and denied aid and comfort. With this issue Mitchill was able to secure changes in the seamen's fund, whereby money was to be paid by the seamen during times of good health directly into the Treasury of the United States. At the discretion of the Secretary of the Treasury, monies from the mariners' funds were expended at any port petitioning for such aid.¹²

In addition to expanding the mariners' fund, Mitchill was able to secure an addition to the act regulating the merchant marine which had provided that ships of more than 150 tons capacity be required to maintain a medicine chest. The part of American commerce most dangerous to the health of seamen was carried on in the Caribbean. Since most ships trading in this area were under 150 tons, the health of the seamen on board was entirely in the hands of the captain or the owner of the ship. As a result of this situation few provisions were maintained for the health of the crew, and Mitchill estimated that one-eighth of the crews lost their lives in this trade, while one-sixth were already beyond medical care. As a consequence of this unhealthy and dangerous situation, young men from New York, fearing for the safety of their lives, were reluctant to engage in work as merchant seamen. To meet this deficiency of approximately 60 per cent of the necessary sailors, un-naturalized seamen from European countries had to be recruited. Through an act of Congress Mitchill was able to secure legislation providing that all ships, regardless of their weight, be required to provide and stock a medicine chest for the health of the crew.¹³

Mitchill returned to the New York College of Physicians and Surgeons, in 1813, after a long and eventful political career in Washington. Five years later he accepted, once again, a political appointment. Governor DeWitt Clinton appointed Mitchill Surgeon-General of the militia of the State of New York. In this capacity he recommended and instituted a sweeping series of reforms. It appalled his medical and patriotic nature to witness so little care and interest being manifested in bettering the health and effectiveness of the protectors of the State. As the militia was necessary for the public defense, their lives were far too precious to be lost through carelessness; conversely,

if the soldier was assured that his life would be in the hands of one genuinely concerned for him should he become sick or wounded, he would be inspired to greater acts of courage. Mitchill's program was divided into four main categories: Firstly, soldiers were fed too much, thus making them prone to a state of lethargy. They should not receive quantities of food beyond that absolutely necessary for healthful nourishment. In addition, to maintain a healthy constitution their bodies should be exercised and hardened to all the elements of nature. Secondly, the over-use of heavy clothing and the consumption of great quantities of fuel for heating tended to induce indolence among soldiers. He remarked that "an ounce of heat evolved by the animal power of the healthy constitution, is of more value than a pound derived from the consumption of fuel in a fire place".¹⁴ Thirdly, more attention should be directed toward exercise to insure that both the mind and body would be stimulated at the expense of sloth and idleness. During peace-time the soldier should be put to useful work such as constructing bridges, fortifying roads, learning arts and crafts, or should engage in various sports. Fourthly, the state of mind should be watched. "Babyism" and homesickness should be prevented by keeping the soldier as busy as possible, because the longing for maternal care had at times in the past weakened military effectiveness.

Mitchill's patriotic impulses, which did much to advance the cause of medicine, also brought him great success during his own lifetime. Indeed, during this pre-specialized period of our nation's history, the role of the doctor was infinitely more varied and challenging. Mitchill himself recognized that "a seat in the House and in the Senate, high commands in the Army and Navy, and the dignity of Governor in the States, has frequently been conferred . . . upon medical men."¹⁵

NOTES AND REFERENCES

1. Some additional biographical information about Mitchill as well as a discussion of his activities in chemistry, botany and geology can be found in C. R. Hall, *A Scientist in the Early Republic*, New York, Columbia University Press, 1934.
2. Shryock, R. H. *Medicine and Society in America, 1660-1860*. New York, University Press, 1960, p. 58.
3. Mitchill to Benjamin Rush, February 11, 1794, Sept. 20, 1795, Aug. 12, 1800 (Library Company of Philadelphia).
4. *Report of the Committee appointed by the Medical Society of the State of New York, to Enquire into the Symptoms, Origin, Cause, and Prevention of the Pestilential Disease that Prevailed in New York during the Summer and Autumn of the Year 1798*. Hereafter cited as *Report of the Committee, 1798*.
5. According to Shryock there seems to

- be little evidence that the majority of physicians took any interest in sanitary reform since such an interest would not require specific medical knowledge, and was not aimed at any particular disease. See Shryock, *op. cit.*
6. Mitchill to Noah Webster, Sept. 17, 1798, printed in Stokes, *Iconography of New York* (New York, 1915-28), V, pp. 1356-7.
 7. *Report of the Committee, 1798*, p. 11.
 8. *Ibid.*, p. 21.
 9. *Annals of Congress, Debates and Proceedings in the Congress of the United States, Feb. 25, 1799* (Washington, 1851), VIII, p. 3802.
 10. *Medical Repository* (New York, 1818), XIX, pp. iii-iv.
 11. In 1802 Robert Smith, the Secretary of the Navy, requested Mitchill to forward recommendations to improve the health of American sailors. Mitchill reported that it was the custom of most of the navies of the various countries, including the United States, to require that sailors purchase their own supply of soap. In consequence of this measure, it was apparent that few sailors both-
 - ered to purchase this product, resulting in the increase of the over-all filthiness of the ship and the members of the crew. From this point on, soap was issued to all members of the crew as part of their rations. See *Medical Repository* (New York, 1802), V, pp. 56-59.
 12. Samuel L. Mitchill, "Report to the House of Representatives of Memorial of Citizens and Mariners of Baltimore, concerning the Suffering of American Sailors at home," *Medical Repository* (New York, 1805), VIII, pp. 89-92. See also Mitchill to Dr. Levi Myers, Feb. 2, 1805, Mitchill Papers (Columbia University).
 13. *Annals of Congress*, Nov. 24, 1804, XIV pp. 696-7.
 14. Samuel L. Mitchill, "Report by the Surgeon-General of the Militia of the State of New York, to DeWitt Clinton, Commander-in-Chief," Oct. 30, 1818, *Medical Repository* (New York, 1817), XX, pp. 24-35.
 15. Samuel L. Mitchill, *Address to Officers Comprising the Medical Staff* (New York, 1820), p. 3.

